

IN THE CLAIMS

1. (Currently Amended) A high frequency power amplification electric part comprising:

a power amplification circuit for amplifying a modulated high frequency signal;

a first transistor for output detection, for receiving an input signal from the power amplification circuit for detecting an output of the power amplification circuit by receiving a signal input to the power amplification circuit;

a current mirror circuit for passing generating a first current proportional to in proportion to a second current of the first transistor; and

a bias generating circuit for supplying a bias to said power amplification circuit in accordance with the first current transmitted from the current mirror circuit,

wherein a capacitive first capacitive element for transmitting fluctuation in an output power variation of said output of said power amplification circuit is connected coupled between an output terminal side of said power amplification circuit and a control terminal of a third

~~transistor for passing the current of the transmission source~~  
~~of included in said current mirror circuit for receiving the~~  
~~second current.~~

2. (Currently Amended) The high frequency power amplification electric part according to claim 1, wherein an impedance matching circuit and a ~~capacitative second~~ capacitive element for blocking direct current are ~~connected~~ coupled between said output terminal of said power amplification circuit and the output terminal, and one of ~~terminals end of said capacitative first capacitive element~~ for transmitting fluctuation in output power is connected coupled to any one of nodes between the drain terminal of said transistor for power amplification said output terminal of the power amplification circuit and said ~~capacitative second~~ capacitive element ~~for blocking direct current.~~

3. (Currently Amended) The high frequency power amplification electric part according to claim 1, wherein said ~~first transistor for output detection~~ and said current mirror circuit are formed on ~~the a~~ a same semiconductor chip, the

semiconductor chip and said power amplification circuit are mounted on an insulating substrate, and said ~~capacitative first capacitive element for transmitting fluctuation in output power~~ is constructed by a dielectric layer formed on said insulating substrate and a pair of conductive layers formed so as to sandwich the dielectric layer.

4. (Currently Amended) The high frequency power amplification electric part according to claim 1, wherein said ~~capacitative first capacitive element for transmitting fluctuation in output power~~ has a capacitance value of at least 1 pF or larger.

5. (Currently Amended) The high frequency power amplification electric part according to claim 1, further comprising a resistive element for converting the first current transferred from said current mirror circuit into a voltage, ~~said resistive element being mounted as a discrete part on said insulating substrate.~~

6. (Currently Amended) The high frequency power amplification electric part according to claim ~~1~~ 5, wherein ~~said bias generating circuit has further comprising a~~ comparing circuit for comparing ~~a~~ the voltage obtained by conversion of said resistive element ~~for current-voltage conversion~~ with an output level instruction signal and ~~outputting~~ outputting a signal according to the difference, ~~and a bias is given of the voltage and the output level instruction signal, wherein the bias generating circuit generates said bias to said power amplification circuit on the basis of~~ in accordance with an output of the comparing circuit.

7. (Currently Amended) The high frequency power amplification electric part according to claim 1, wherein said power amplification circuit ~~is constructed by~~ includes a field effect transistor, and ~~a~~ the bias voltage generated by said ~~bias generating circuit is applied~~ supplied to the gate terminal of said field effect transistor ~~for power amplification~~.

8. (Currently Amended) The high frequency power amplification electric part according to claim 1, ~~wherein in said power amplification circuit, a plurality of transistors are cascaded~~wherein said power amplification circuit has a plurality of amplifying stages coupled in cascade, a transistor in the a final stage of the plurality of amplifying stages is formed on a first semiconductor chip, the ~~transistors amplifying stages other than the transistor in the final stage of said power amplification circuit are formed on a second semiconductor chip, and said first transistor for output detection and said current mirror circuit are formed on a third semiconductor chip.~~

9. (Currently Amended) The high frequency power amplification electric part according to claim 1, ~~wherein in said power amplification circuit, a plurality of transistors are cascaded~~wherein said power amplification circuit has a plurality of amplifying stages coupled in cascade, at least a transistor in the a final stage of the plurality of amplifying stages, said first transistor for output detection, and said current mirror circuit are formed on the a first semiconductor

chip, and ~~transistors~~ said amplifying stages other than the ~~transistor in the final stage of said power amplification circuit~~ are formed on ~~the~~ a second semiconductor chip.

10. (Currently Amended) The high frequency power amplification electric part according to claim 1, wherein a resistive element is ~~connected~~ coupled between a ~~control terminal of said transistor for power amplification~~ an input terminal of said power amplification circuit and a control terminal of said first ~~transistor for output detection~~.

11. (Currently Amended) The high frequency power amplification electric part according to claim 1, wherein a resistive element is ~~connected~~ coupled between said first transistor ~~for output detection~~ and a said third transistor ~~for passing current transmitted from said current mirror circuit~~.

12. (Previously Presented) A wireless communication system comprising:

a high frequency power amplification electric part according to claim 1;

a second electric part having a transmission/reception switching circuit for switching between a transmission signal and a reception signal;

a third electric part for modulating a signal to be transmitted and supplying the modulated signal to said high frequency power amplification electric part; and

a semiconductor integrated circuit for supplying an output level instruction signal to said high frequency power amplification electric part.

13. (Original) The wireless communication system according to claim 12, wherein said high frequency power amplification electric part has a first power amplification circuit for amplifying a signal in a first frequency band and a second power amplification circuit for amplifying a signal in a second frequency band,

said second electric part has signal switching means for switching between a signal in the first frequency band and the signal in the second frequency band, and

said third electric part has a circuit for modulating the signal in the first frequency band and a circuit for modulating a signal in the second frequency band.

14. (Currently Amended) A high frequency power amplification electric part comprising:

a power amplification circuit having an output terminal for receiving a high frequency signal as an input signal and outputting a signal according to the input signal;

a detecting circuit having a transistor for output detection which receives the input signal from the power amplification circuit, and forming an output signal according to said input signal;

a bias generating circuit for applying a bias according to the output signal of the detecting circuit to said power amplification circuit; and

a ~~capacitive~~ first capacitive element for transmitting fluctuation in said output terminal to said detecting circuit, which is connected between the output terminal of said power amplification circuit and said detecting circuit.



15. (Currently Amended) The high frequency power amplification electric part according to claim 14, wherein an impedance matching circuit and a ~~capacitative~~ second capacitive element for blocking direct current are connected between the output terminal of said power amplification circuit and a terminal to which an antenna is to be connected, and one of terminals of said ~~capacitative~~ first capacitive element is ~~connected~~ coupled between the output terminal of the power amplification circuit and said ~~capacitative~~ second capacitive element for blocking direct current.

16. (Previously Presented) A wireless communication system comprising:

a high frequency power amplification electric part according to claim 14;

a second electric part having a transmission/reception switching circuit for switching between a transmission signal and a reception signal;

a third electric part for modulating a signal to be transmitted and supplying the modulated signal to said high frequency power amplification electric part; and

a semiconductor integrated circuit for supplying an output level instruction signal to said high frequency power amplification electric part.